

**Presentation:** "TMDL Requirements"

**Speaker:** Mr. David Smith, EPA Region 9

Mr. Smith has been with EPA for 12 years. He serves as Region 9's TMDL Team Leader. Prior to joining EPA, Mr. Smith worked for the State of California's Congressional Budget Office, as well as several private consulting firms.

**Handout:** "TMDL Basics and Current Issues"

**Notes:**

Mr. Smith discussed the new requirements of the TMDL program.

Mr. Smith explained that TMDLs are the amount of a pollutant that can be discharged to a water body and still attain water quality goals. TMDLs are required for impaired or polluted waters and are used to set priorities for developing watershed plans and to calculate individual load allocations. Load allocations assign responsibility for water quality to dischargers to the water body.

The law requires EPA to implement TMDLs as a means of providing a comprehensive and balanced accounting of pollution problems. TMDLs are tools for analyzing control and restoration options and costs. TMDLs may affect how permits are written and may result in tightening of existing permit limits.

**Discussion:**

Regarding	Questions/Remarks	Response*
TMDL vs. MCL	What is the difference and/or the relationship between TMDL and MCL? (Sami Abdalla)	MCLs are water quality goals that address drinking water. Usually we think of the MCLs as the amount of contaminant that can be in your drinking water. Many states simply adopt MCLs as water quality standards to protect the drinking water use of the water.  If the MCL is the most stringent standard for the water, then that drives the level of pollutant reduction that we need to protect that water body. Most of the time, the most sensitive uses are aquatic life, aquatic habitat, or fish consumption (i.e., protection of human health associated with fish consumption). For things like bacteria, the big issue is bathing, swimming, and body contact recreation.
	Is there a level of protection below which we don't worry about TMDL pollutants?	It really is pollutant-specific. In theory, we should be protecting the waters where a pollutant is causing a problem.
Slide: TMDL	How are pollutant loads	The states have a lot of flexibility in how

Regarding	Questions/Remarks	Response*
example	allocated?	they allocate loads. Most states try to allocate based on the most cost-effective combination of controls, so that the cumulative cost of meeting the standard is minimal. In a lot of states, however, lack of sufficient data results in allocations based on who is loudest in the process. The point-source dischargers tend to be the most organized and probably the loudest.
	Do we combine TMDLs with storm water rules?	We kind of do that right now. Writing TMDLs and writing storm water permits is probably the toughest intersection of CWA implementation, because it's hard to manage storm water. TMDLs have this mandate from Congress to write them stringent enough to meet the water quality standards. Then we have the storm water program that says you will control pollutants to the maximum extent practicable. The argument gets back to "high water." So it certainly has become one of the places to figure out how we're going to do the next generation of storm water management. A lot of progress has already been made in improving storm water management during the first two years of the storm water program. My sense is that it's principally where TMDLs are getting written, that we're figuring out that next generation of how we're going to deal with water quality controls.
MCLs and protection of aquatic life		<p>(1) MCLs are not designed to be protective of aquatic life for most pollutants; they're designed to protect people. Most water quality standards are more stringent than the MCL in order to protect aquatic life and for fish consumption.</p> <p>(2) Protecting aquatic habitat seems to be the most sensitive use. Protecting drinking water use is very rarely the big issue that we're trying to deal with. The idea is that if you protect the fish habitat, that's going to be tight enough to protect drinking water/consumption.</p>

Regarding	Questions/Remarks	Response*
		(3) TMDLs were not designed to deal with one-time incidents. At least in this region, we generally don't list waters for TMDL development based on one-time spills.
Storm water permits, TMDLs, and effluent limits	How will TMDLs affect storm water discharges?	<p>(1) In general, storm water permits will see more numeric effluent limits.</p> <p>(2) In terms of general permits, I don't think that the permitting agencies have figured out how to write a general permit and how to interface with a place where there's a TMDL. The options I've seen are:</p> <ul style="list-style-type: none"> <li>• Create a kick-out provision that says if you're in a watershed that has TMDL, you are required to get an individual permit.</li> <li>• Place a higher level of required controls if you're in one of those watersheds where the water is impaired.</li> </ul>
Infrequent storm water events	How do you set a TMDL at a reasonable level to address the build up in a system, which results from infrequently occurring events.	You may choose to consider the seasonality of events when writing TMDLs, so that these rare events don't drive absurdly low limits.
	Is anyone looking at the impact that wildlife has on water bodies?	<p>Several TMDLs try to distinguish between human cost and animal cost. It's expensive the first few times it's done, but the process indicates that the human contribution to watersheds is not very significant. Then the challenge is what to do with that data.</p> <p>The TMDL is the mechanism for relating what's going on up on the land and what's coming into the water, and basically figures out what we have to do on the land to meet the water quality goals. The water quality standard is usually set at the statewide level or very broad level. The TMDL is what implements the statewide water quality standard in an individual watershed for an individual set of</p>

Regarding	Questions/Remarks	Response*
		circumstances.